



SEQUENCE LISTING

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<110> Curiel, David T.
Krasnykh, Victor N.
Dmitriev, Igor

<120> Adenovirus Vector Containing A Heterologous Peptide
Epitope in the HI Loop of the Fiber Knob

<130> D6080

<140> 09/245,603

<141> 1999-02-05

<150> US 60/099,801
US 60/073,947

<151> 1998-09-10
1998-02-06

<160> 17

<210> 1

<211> 38

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<223> Forward primer F1 used to generate a gene encoding
the Ad5 fiber knob domain with the HI loop deleted.

<400> 1
taaggatccg gtgccattac agtaggaaac aaaaataa 38

<210> 2

<211> 43

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<223> Reverse primer R1 used to generate a gene encoding
the Ad5 fiber knob domain with the HI loop deleted.

<400> 2
catagagtat gcagatatcg ttagtggttac aggtttagtt ttg 43

<210> 3
 <211> 42
 <212> DNA
 <213> artificial sequence
 <220>
 <221> primer_bind
 <223> Forward primer F2 used to generate a gene encoding
 the Ad5 fiber knob domain with the HI loop deleted.
 <400> 3
 gtaacactaa cgatatctgc atactctatg tcattttcat gg 42

<210> 4
 <211> 41
 <212> DNA
 <213> artificial sequence
 <220>
 <221> primer_bind
 <223> Reverse primer R2 used to generate a gene encoding
 the Ad5 fiber knob domain with the HI loop deleted.
 <400> 4
 cccaagctta caattgaaaa ataaacacgt tgaaacataa c 41

<210> 5
 <211> 63
 <212> DNA
 <213> artificial sequence
 <220>
 <223> Oligonucleotide annealed with SEQ ID NO: 6 to form a
 duplex and cloned into *EcoRV*-digested pQE.KNOBDHI.
 <400> 5
 tacactaaac ggtacccagg aaacaggaga cacaactgac tacaaggacg acgatgacaa 60
 gcc 63

<210> 6
 <211> 63

<212> DNA
 <213> artificial sequence
 <220>
 <223> Oligonucleotide annealed with SEQ ID NO: 5 to form a
 duplex and cloned into *EcoRV*-digested pQE.KNOBDHI.
 <400> 6
 ggcttgatcat cgctgtcctt gtagtcagtt gtgtctcctg tttcctgggt accgtttagt 60
 gta 63

<210> 7
 <211> 29
 <212> DNA
 <213> artificial sequence
 <220>
 <223> Oligonucleotide used in synthetic duplex which
 encodes MetHis₆Lys.
 <400> 7
 gatccatgca tcaccatcac catcacaag 29

<210> 8
 <211> 29
 <212> DNA
 <213> artificial sequence
 <220>
 <223> Oligonucleotide used in synthetic duplex which
 encodes MetHis₆Lys.
 <400> 8
 cgcgcttggtg atggtgatgg tgatgcatg 29

<210> 9
 <211> 16
 <212> DNA
 <213> artificial sequence
 <220>
 <223> An *NdeI*-*SwaI* linker ligated to plasmid pTG3602 after

partial digestion of the plasmid with *NdeI*.

<400> 9
taccatttta aatggg 16

<210> 10
<211> 66
<212> DNA
<213> artificial sequence
<220>
<223> Oligonucleotide in duplex cloned into *EcoRV* site
of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.

<400> 10
cacactaaac ggtacacagg aaacaggaga cacaacttgt gactgccgcg gagactgttt 60
ctgccc 66

<210> 11
<211> 66
<212> DNA
<213> artificial sequence
<220>
<221> primer_bind
<223> Oligonucleotide in duplex cloned into *EcoRV* site
of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.

<400> 11
gggcagaaac agtctccgcg gcagtcacaa gttgtgtctc ctgtttcctg tgtaccgttt 60
agtgtg 66

<210> 12
<211> 41
<212> DNA
<213> artificial sequence
<220>
<223> Oligonucleotide in synthetic duplex used to
replace 41 bp *PacI*-*ClaI*-fragment in pcDNA.Luc,
generating pcLucPC1.

<400> 12

caaatacaaa ggatatcagg tggccccgc tgaattggag t

41

<210> 13

<211> 45

<212> DNA

<213> artificial sequence

<220>

<223> Oligonucleotide in synthetic duplex used to replace 41 bp *PacI*-*ClaI*-fragment in pcDNA.Luc, generating pcLucPC1.

<400> 13

cgactccaat tcagcggggg ccacctgata tcctttgtat ttgat

45

<210> 14

<211> 13

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence deleted from the HI loop of the fiber knob domain and replaced with a unique *EcoRV* site.

<400> 14

Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro

5

10

<210> 15

<211> 8

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of the FLAG octapeptide.

<400> 15

Asp Tyr Lys Asp Asp Asp Asp Lys

5

<210> 16

<211> 9

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of a RGD peptide incorporated into the region of the fiber gene within the HI loop.

<400> 16

Cys Asp Cys Arg Gly Asp Cys Phe Cys

5

<210> 17

$\langle 211 \rangle$ 13

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of peptide replacing the RGD coding sequence.

<400> 17

Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro

5

10